

ABSTRACT OF THE DISCLOSURE

A data processing device using pipeline architecture which enables to reduce a time loss due to a branch without causing an increase in circuit scale. The data processing device uses pipeline control. The data processing device includes an instruction queue in which a plurality of instruction codes can be fetched, a fetch address operation circuit which calculates a fetch address, a fetch circuit which fetches an instruction code based on the fetch address, and a branch information setting circuit which decodes a branch setting instruction, stores a branch address in a branch address storage register, and stores a branch target address in a branch target address storage register. The fetch address operation circuit compares either a previous fetch address or an expected next fetch address with a value stored in the branch address storage register, and determines a next fetch address to be output, based on the comparison result.